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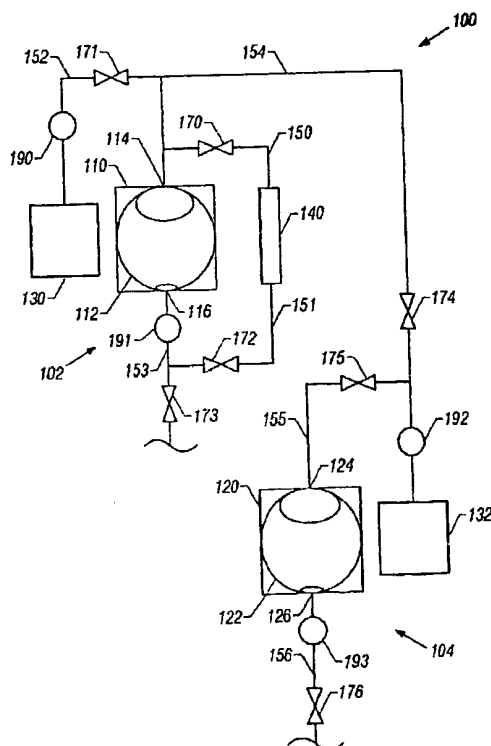
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(54) Title: CLEANING SYSTEM UTILIZING AN ORGANIC CLEANING SOLVENT AND A PRESSURIZED FLUID SOL-
VENT



(57) Abstract: A cleaning system that utilizes an organic cleaning solvent and pressurized fluid solvent is disclosed. The system has no conventional evaporative hot air drying cycle. Instead, the system utilizes the solubility of the organic solvent in pressurized fluid solvent as well as the physical properties of pressurized fluid solvent. After an organic solvent cleaning cycle, the solvent is extracted from the textiles at high speed in a rotating drum (112, 122) in the same way conventional solvents are extracted from textiles in conventional evaporative hot air dry cleaning machines. Instead of proceeding to a conventional drying cycle, the extracted textiles are then immersed in pressurized fluid solvent to extract the residual organic solvent from the textiles. This is possible because the organic solvent is soluble in pressurized fluid solvent. After the textiles are immersed in pressurized fluid solvent, pressurized fluid solvent is pumped from the drum (112, 122). Finally, the drum is de-pressurized to atmospheric pressure to evaporate any remaining pressurized fluid solvent, yielding clean, solvent free textiles. The organic solvent is preferably selected from terpenes, halohydrocarbons, certain glycol ethers, polyols, ethers, esters of glycol ethers, esters of fatty acids and other long chain carboxylic acids, fatty alcohols and other long-chain alcohols, short-chain alcohols, polar aprotic solvents, siloxanes, hydrofluoroethers, dibasic esters, and aliphatic hydrocarbons solvents or similar solvents or mixtures of such solvents and the pressurized fluid solvent is preferably densified carbon dioxide.

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A. CLASSIFICATION OF SUBJECT MATTER

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 01 29305 A (RACETTE ET AL) 26 April 2001 (2001-04-26) the whole document -- -/--	1-108



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 01 29306 A (RACETTE ET AL) 26 April 2001 (2001-04-26)	1, 2, 6, 10, 14, 18, 22, 25, 28, 32, 36, 39, 42, 45, 48, 51, 54-56, 60, 64, 68, 72, 76, 79, 82, 86, 90, 93, 96, 99, 102, 105, 108
A		3-5, 7-9, 11-13, 15-17, 19-21, 23, 24, 26, 27, 29-31, 33-35, 37, 38, 40, 41, 43, 44, 46, 47, 49, 50, 52, 53, 57-59, 61-63, 65-67, 69-71, 73-75, 77, 78, 80, 81, 83-85, 87-89, 91, 92, 94, 95, 97, 98, 100, 101, 103, 104, 106, 107
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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A		3-5, 7-9, 11-13, 15-17, 19-21, 23, 24, 26, 27, 29-31, 33-35, 37, 38, 40, 41, 43, 44, 46, 47, 49, 50, 52, 53, 57-59, 61-63, 65-67, 69-71, 73-75, 77, 78, 80, 81, 83-85, 87-89, 91, 92, 94, 95, 97, 98, 100, 101, 103, 104, 106, 107
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International Application No

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X	US 5 417 768 A (SMITH, JR. ET AL) 23 May 1995 (1995-05-23) cited in the application	1,2,6, 10,14, 18,22, 25,28, 32,36, 39,42, 45,48, 51, 54-56, 60,64, 68,72, 76,79, 82,86, 90,93, 96,99, 102,105, 108
A		3-5,7-9, 11-13, 15-17, 19-21, 23,24, 26,27, 29-31, 33-35, 37,38, 40,41, 43,44, 46,47, 49,50, 52,53, 57-59, 61-63, 65-67, 69-71, 73-75, 77,78, 80,81, 83-85, 87-89, 91,92
A	abstract column 6, line 3 - line 11 claim 1; figure ---	94,95, 97,98, 100,101, 103,104, 106,107
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International Application No

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X	WO 97 38044 A (BESPAK PLC ET AL) 16 October 1997 (1997-10-16)	1,2,6, 10,14, 18,22, 25,28, 32,36, 39,42, 45,48, 51, 54-56, 60,64, 68,72, 76,79, 82,86, 90,93, 96,99, 102,105, 108
A		3-5,7-9, 11-13, 15-17, 19-21, 23,24, 26,27, 29-31, 33-35, 37,38, 40,41, 43,44, 46,47, 49,50, 52,53, 57-59, 61-63, 65-67, 69-71, 73-75, 77,78, 80,81, 83-85, 87-89, 91,92, 94,95, 97,98, 100,101, 103,104, 106,107
A	abstract page 4, line 10 - line 30; claims ----- -/--	

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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 377 705 A (SMITH, JR. ET AL) 3 January 1995 (1995-01-03) cited in the application	1,2,6, 10,14, 18,22, 25,28, 32,36, 39,42, 45,48, 51, 54-56, 60,64, 68,72, 76,79, 82,86, 90,93, 96,99, 102,105, 108
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A	abstract column 5, line 33 - line 41 column 6, line 2 - line 4 column 6, line 53 - column 7, line 1 column 8, line 19 - line 24; figure 1 — -/-	94,95, 97,98, 100,101, 103,104, 106,107

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